

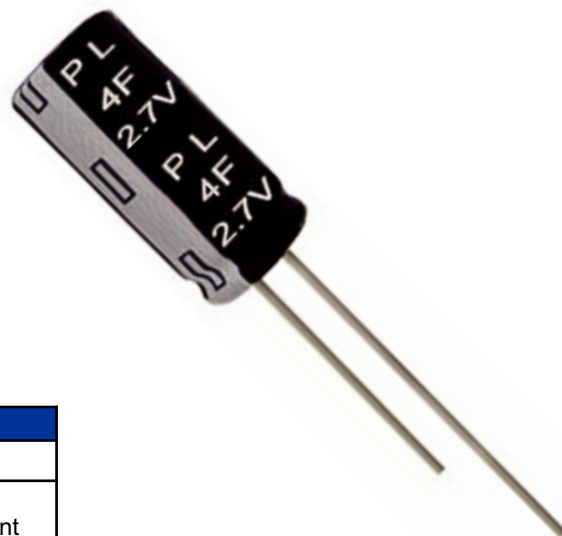
FEATURES

- Small size and low-resistance
- Quick charge & discharge
- RoHS compliant

POWERBURST[®]
ULTRACAPACITORS

APPLICATIONS

- Pulse power demand
- Hybrid battery packs
- Portable Electronic Devices



PART NUMBERING

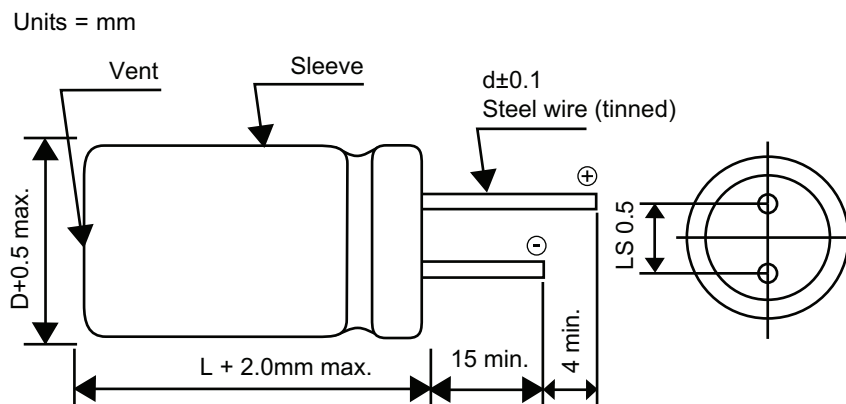
Part Number Example: TPL-4.0/10X20F					
TPL	-	4.0	/	10X20	F
Type		Capacitance Code (F)		Size (D X L)	RoHs Compliant

SPECIFICATIONS

Item	Performance	
Category temperature range	-40°C ~ +70°C.	
Rated voltage	2.7VDC.	
Capacitance	0.5F ~ 70F.	
Capacitance tolerance	+30%, -20%.	
Characteristics at low temperature	Capacitance Change	Within ±30% of initial measured value at +25°C(-40°C to +70°C)
	Internal resistance	Within 4 times of initial measured value at +25°C(at -40°C)
Endurance	After 1,000 hours application of 2.7V. DC at +70°C, the capacitor shall meet the following limits.	
	Capacitance Change	Within ±30% of initial measured value
	Internal resistance	Within 2 times of initial specified value
Shelf Life	After 1,000 hours storage at +70°C without load, the capacitor shall meet the specified limits for Endurance.	
Humidity Test	After 500 hour storage at 40±2°C,90 to 95% R.H, the capacitor shall meet the specified limits for Endurance.	

DIMENSIONS

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STANDARD PRODUCTS

Part Numbers	CAP. (F)	ESR/DC (mΩ)	ESR/AC 1kHz (mΩ)	Leakage Current (mA/12hrs)	Size (mm)				Rated Voltage (VDC)	Typical Pkg. Qty.	Weight/unit (grams)
					D	L	d	LS			
TPL-0.5/8X12F	0.5	2000	1000	0.6	8	12	0.6	3.8	2.7	200	1
TPL-1.0/8X12F	1	1000	500	0.7	8	12	0.6	3.8	2.7	200	1
TPL-1.5/8X14F	1.5	600	300	0.8	8	14	0.6	3.8	2.7	200	1.2
TPL-2.0/8X16F	2	500	350	0.8	8	16	0.6	3.8	2.7	200	1.3
TPL-3.3/8X20F	3.3	350	250	0.8	8	20	0.6	3.8	2.7	200	1.5
TPL-3.3/10X20F	3.3	350	250	0.8	10	20	0.6	5	2.7	200	1.8
TPL-4.0/10X20F	4	300	150	1.2	10	20	0.6	5	2.7	200	2
TPL-5.0/10X20F	5	200	120	1.2	10	20	0.6	5	2.7	200	2.2
TPL-6.0/10X20F	6	150	100	1.2	10	20	0.6	5	2.7	100	2.5
TPL-8.0/10X25F	8	100	70	1.3	10	25	0.6	5	2.7	100	3
TPL-10/10X30F	10	100	70	1.4	10	30	0.6	5	2.7	100	4
TPL-15/12X31F	15	100	70	1.4	12.5	31.5	0.8	8	2.7	50	5
TPL-22/12X35F	22	60	40	1.4	12.5	35.5	0.8	8	2.7	50	6.5
TPL-25/16X26F	25	60	40	1.5	16	26	0.8	8	2.7	50	7
TPL-30/16X31F	30	40	30	1.5	16	31.5	0.8	8	2.7	50	8.5
TPL-50/18X41F	50	40	30	1.6	18	41	1	8	2.7	50	14
TPL-60/18X45F	60	25	18	1.6	18	45	1	8	2.7	50	16
TPL-70/18X45F	70	25	18	1.6	18	45	1	8	2.7	50	16